

full back position), of the three dimensional SAE J826 manikin, at the manufacturer's recommended design seated position.

(b) Establish the displaced torso reference line by applying a rearward moment of 373 Nm moment about the seating reference point to the seat back through the test device back pan located in (a).

(c) After removing the back pan, using a 165 mm diameter spherical head form or cylindrical head form having a 165 mm diameter in plan view and a 152 mm height in profile view, apply, perpendicular to the displaced torso reference line, a rearward initial load 64 mm below the top of the head restraint that will produce a 373 Nm moment about the seating reference point.

(d) Gradually increase this initial load to 890 N or until the seat or seat back fails, whichever occurs first.

[36 FR 22902, Dec. 2, 1971, as amended at 54 FR 39187, Sept. 25, 1989; 61 FR 27025, May 30, 1996; 63 FR 28935, May 27, 1998]

**§ 571.203 Standard No. 203; Impact protection for the driver from the steering control system.**

*S1. Purpose and scope.* This standard specifies requirements for steering control systems that will minimize chest, neck, and facial injuries to the driver as a result of impact.

*S2. Application.* This standard applies to passenger cars and to multipurpose passenger vehicles, trucks and buses with a gross vehicle weight rating of 4,536 kg or less. However, it does not apply to vehicles that conform to the frontal barrier crash requirements (S5.1) of Standard No. 208 (49 CFR 571.208) by means of other than seat belt assemblies. It also does not apply to walk-in vans.

*S3. Definitions. Steering control system* means the basic steering mechanism and its associated trim hardware, including any portion of a steering column assembly that provides energy absorption upon impact.

*S4. Requirements.* Each passenger car and each multipurpose passenger vehicle, truck and bus with a gross vehicle weight rating of 4,536 kg or less manufactured on or after September 1, 1981 shall meet the requirements of S5.1 and S5.2.

*S5. Impact protection requirements.*

*S5.1* Except as provided in this paragraph, the steering control system of any vehicle to which this standard applies shall be impacted in accordance with S5.1(a). However, the steering control system of any such vehicle manufactured on or before August 31, 1996, may be impacted in accordance with S5.1(b).

(a) When the steering control system is impacted by a body block in accordance with SAE Recommended Practice J944 JUN80 Steering Control System—Passenger Car—Laboratory Test Procedure, at a relative velocity of 24 km/h, the impact force developed on the chest of the body block transmitted to the steering control system shall not exceed 11,120 N, except for intervals whose cumulative duration is not more than 3 milliseconds.

(b) When the steering control system is impacted in accordance with Society of Automotive Engineers Recommended Practice J944, "Steering Wheel Assembly Laboratory Test Procedure," December 1965, or an approved equivalent, at a relative velocity of 24 km/h, the impact force developed on the chest of the body block transmitted to the steering control system shall not exceed 11,120 N, except for intervals whose cumulative duration is not more than 3 milliseconds.

*S5.2* The steering control system shall be so constructed that no components or attachments, including horn actuating mechanisms and trim hardware, can catch the driver's clothing or jewelry during normal driving maneuvers.

NOTE: The term jewelry refers to watches, rings, and bracelets without loosely attached or dangling members.

[36 FR 22902, Dec. 2, 1971, as amended at 44 FR 68475, Nov. 29, 1979; 47 FR 47842, Oct. 28, 1982; 58 FR 26527, May 4, 1993; 58 FR 63304, Dec. 1, 1993; 63 FR 28935, May 27, 1998; 63 FR 51003, Sept. 24, 1998]

**§ 571.204 Standard No. 204; Steering control rearward displacement.**

*S1. Purpose and scope.* This standard specifies requirements limiting the rearward displacement of the steering control into the passenger compartment to reduce the likelihood of chest, neck, or head injury.

**S2. Application.** This standard applies to passenger cars and to multipurpose passenger vehicles, trucks, and buses. However, it does not apply to walk-in vans.

**S3. Definitions.**

*Steering column* means a structural housing that surrounds a steering shaft.

*Steering shaft* means a component that transmits steering torque from the steering wheel to the steering gear.

**S4 Requirements.**

**S4.1 Vehicles manufactured before September 1, 1991.** When a passenger car or a truck, bus, or multipurpose passenger vehicle with a gross vehicle weight rating of 10,000 pounds or less and an unloaded vehicle weight of 4,000 pounds or less is tested under the conditions of S5 in a 30 mile per hour perpendicular impact into a fixed collision barrier, the upper end of the steering column and shaft in the vehicle shall not be displaced more than 5 inches in a horizontal rearward direction parallel to the longitudinal axis of the vehicle. The amount of displacement shall be measured relative to an undisturbed point on the vehicle and shall represent the maximum dynamic movement of the upper end of the steering column and shaft during the crash test.

**S4.2 Vehicles manufactured on or after September 1, 1991.** When a passenger car or a truck, bus or multipurpose passenger vehicle with a gross vehicle weight rating of 4,536 kg or less and an unloaded vehicle weight of 2,495 kg or less is tested under the conditions of S5 in a 48 km/h perpendicular impact into a fixed collision barrier, the upper end of the steering column and shaft in the vehicle shall not be displaced more than 127 mm in a horizontal rearward direction parallel to the longitudinal axis of the vehicle. The amount of displacement shall be measured relative to an undisturbed point on the vehicle and shall represent the maximum dynamic movement of the upper end of the steering column and shaft during the crash test.

**S5. Test conditions.** The requirements of S4 shall be met when the vehicle is tested in accordance with the following conditions.

**S5.1** The vehicle, including test devices and instrumentation, is loaded to its unloaded vehicle weight.

**S5.2** Adjustable steering controls are adjusted so that a tilting steering wheel hub is at the geometric center of the locus it describes when it is moved through its full range of driving positions. A telescoping steering control is set at the adjustment position midway between the forwardmost and rearwardmost position.

**S5.3** Convertibles and open-body type vehicles have the top, if any, in place in the closed passenger compartment configuration.

**S5.4** Doors are fully closed and latched but not locked.

**S5.5** The fuel tank is filled to any level from 90 to 95 percent of capacity.

**S5.6** The parking brake is disengaged and the transmission is in neutral.

**S5.7** Tires are inflated to the vehicle manufacturer's specifications.

[52 FR 44897, Nov. 23, 1987, as amended at 63 FR 28935, May 27, 1998; 63 FR 51003, Sept. 24, 1998]

**§ 571.205 Standard No. 205, Glazing materials.**

**S1. Scope.** This standard specifies requirements for glazing materials for use in motor vehicles and motor vehicle equipment.

**S2. Purpose.** The purpose of this standard is to reduce injuries resulting from impact to glazing surfaces, to ensure a necessary degree of transparency in motor vehicle windows for driver visibility, and to minimize the possibility of occupants being thrown through the vehicle windows in collisions.

**S3. Application.** This standard applies to glazing materials for use in passenger cars, multipurpose passenger vehicles, trucks, buses, motorcycles, slide-in campers, and pickup covers designed to carry persons while in motion.

**S4. Definitions.**

*Bullet resistant shield* means a shield or barrier that is installed completely inside a motor vehicle behind and separate from glazing materials that independently comply with the requirements of this standard.